RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/767,308A
Source:	1FW/6.
Date Processed by STIC:	1/13/06
	, · ,

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial	Number: 10/767,308A	CRF Edit Date: 1/17/06 Edited by: 1/2
	Realigned nucleic acid/amino acid numbers/text text "wrapped" to the next line	in cases where the sequence
<u>J</u>	Corrected the SEQ ID NO. Sequence numbers e	dited were:
	Inserted or corrected a nucleic number at the en NO's edited:	d of a nucleic line. SEQ ID
	Deleted: invalid beginning/end-of-file text;	page numbers
	Inserted mandatory headings/numeric identifier	s, specifically:
	Moved responses to same line as heading/numeri	ic identifier, specifically:
<u></u>	Other: Seguera 2 - deleted < 2217 - 62237 only 2459 rucleotides were in 3 since ho h's were in the se	section since the sequence, and



WHI

RAW SEQUENCE LISTING DATE: 01/17/2006
PATENT APPLICATION: US/10/767,308A TIME: 13:40:54

Input Set : A:\PTO.AMC.txt

4 <110 > APPLICANT: Kapeller-Libermann, Rosana

```
White, David
         MacBeth, Kyle J.
8 <120> TITLE OF INVENTION: 2786, A NOVEL HUMAN AMINOPEPTIDASE
10 <130> FILE REFERENCE: MPI99-193CN2M
12 <140> CURRENT APPLICATION NUMBER: US 10/767,308A
13 <141> CURRENT FILING DATE: 2004-01-29
15 <150> PRIOR APPLICATION NUMBER: US 09/443,795
16 <151> PRIOR FILING DATE: 1999-11-19
18 <150> PRIOR APPLICATION NUMBER: US 10/056,253
19 <151> PRIOR FILING DATE: 2002-01-24
21 <160> NUMBER OF SEQ ID NOS: 8
23 <170> SOFTWARE: FastSEQ for Windows Version 4.0
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 650
27 <212> TYPE: PRT
28 <213> ORGANISM: Homo sapiens
30 <400> SEQUENCE: 1
31 Met Ala Ser Gly Glu His Ser Pro Gly Ser Gly Ala Ala Arg Arg Pro
33 Leu His Ser Ala Gln Ala Val Asp Val Ala Ser Ala Ser Asn Phe Arg
35 Ala Phe Glu Leu Leu His Leu His Leu Asp Leu Arg Ala Glu Phe Gly
37 Pro Pro Gly Pro Gly Ala Gly Ser Arg Gly Leu Ser Gly Thr Ala Val
39 Leu Asp Leu Arg Cys Leu Glu Pro Glu Gly Ala Ala Glu Leu Arg Leu
                       70
41 Asp Ser His Pro Cys Leu Glu Val Thr Ala Ala Ala Leu Arg Arg Glu
                                       90
43 Arg Pro Gly Ser Glu Glu Pro Pro Ala Glu Pro Val Ser Phe Tyr Thr
              100
                                   105
45 Gln Pro Phe Ser His Tyr Gly Gln Ala Leu Cys Val Ser Phe Pro Gln
                               120
47 Pro Cys Arg Ala Ala Glu Arg Leu Gln Val Leu Leu Thr Tyr Arg Val
49 Gly Glu Gly Pro Gly Val Cys Trp Leu Ala Pro Glu Gln Thr Ala Gly
                       150
                                           155
51 Lys Lys Lys Pro Phe Val Tyr Thr Gln Gly Gln Ala Val Leu Asn Arg
                                       170
53 Ala Phe Phe Pro Cys Phe Asp Thr Pro Ala Val Lys Tyr Lys Tyr Ser
              180
                                   185
55 Ala Leu Ile Glu Val Pro Asp Gly Phe Thr Ala Val Met Ser Ala Ser
```

Input Set : A:\PTO.AMC.txt

56			195					200					205			
57	Thr	Trp	Glu	Lys	Arg	Gly	Pro	Asn	Lys	Phe	Phe	Phe	Gln	Met	Cys	Gln
58		210		_	_	_	215		-			220			-	
59	Pro	Ile	Pro	Ser	Tyr	Leu	Ile	Ala	Leu.	Ala	Ile	Gly	Asp	Leu	Val	Ser
	225				•	230			•		235	-	-			240
		Glu	Val	Glv	Pro		Ser	Ara	Val	Trp		Glu	Pro	Cvs	Leu	
62				1	245	5		5		250				-1-	255	
	Asp	Ala	Δla	Asn		Glu	Tvr	Asn	Gly		Tle	Glu	Glu	Phe		Δla
64	р			260	014	0	-1-		265	•••		014	0_0	270		
	Thr	Glv	Glu		T.e.11	Phe	Glv	Pro	Tyr	Val	Trn	Glv	Δra		Δen	T.e.ii
66	1111	Ory	275	цуо	пси	1110	Ory	280	- y -	VUI	115	Ory	285	- 7 -	nsp	Deu
	Lau	Dho		Dro	Dro	Cor	Dho		Phe	C1v	Clv	Mot		λcn	Dro	Cvc
	пеп		MEC	FIQ	FIU	261	295	FIU	FILE	Gry	GIY		Gru	Apii	FIO	СуБ
68	T 011	290	Dho	17a l	mb	Dwo		T 0	T 011	71.	<u>ما</u>	300	7. 25.00	Com	T 011	71-
		1111	Pne	vaı	1111		Cys	ьeu	Leu	Ald	_	ASP	Arg	ser	ьец	
	305	17-1	T1 =	71 -	***	310	T 1_	0	***	0	315	Dl	~1	7	T	320
	Asp	vaı	тте	rre		GIU	TTE	ser	His		Trp	Pne	GIY	ASII		vai
72	1	_		_	325	~7	~ 7	-1		330	_	~ 3	~7		335	
	Inr	Asn	Ата		Trp	GLY	GIu	Phe	Trp	Leu	Asn	GIu	GLY		Thr	Met
74				340	_				345	_				350	_	_,
	Tyr	Ala		Arg	Arg	He	Ser		Ile	Leu	Phe	Gly		Ala	Tyr	Thr
76	_		355					360					365			_
	Cys		Glu	Ala	Ala	Thr	_	Arg	Ala	Leu	Leu	_	Gln	His	Met	Asp
78		370					375					380				
		Thr	Gly	Glu	Glu		Pro	Leu	Asn	Lys		Arg	Val	Lys	Ile	
	385					390					395					400
81	Pro	Gly	Val	Asp	Pro	Asp	Asp	Thr	Tyr	Asn	Glu	Thr	Pro	Tyr	Glu	Lys
82					405					410					415	
83	Gly	Phe	Cys	Phe	Val	Ser	Tyr	Leu	Ala	His	Leu	Val	Gly	Asp	Gln	Asp
84				420					425					430		
85	Gln	Phe	Asp	Ser	Phe	Leu	Lys	Ala	Tyr	Val	His	Glu	Phe	Lys	Phe	Arg
86			435					440					445			
87	Ser	Ile	Leu	Ala	Asp	Asp	Phe	Leu	Asp	Phe	Tyr	Leu	Glu	Tyr	Phe	Pro
88		450					455					460				
89	Glu	Leu	Lys	Lys	Lys	Arg	Val	Asp	Ile	Ile	Pro	Gly	Phe	Glu	Phe	Asp
90	465					470					475					480
91	Arg	Trp	Leu	Asn	Thr	Pro	Gly	Trp	Pro	Pro	Tyr	Leu	Pro	Asp	Leu	Ser
92					485					490					495	
93	Pro	Gly	Asp	Ser	Leu	Met	Lys	Pro	Ala	Glu	Glu	Leu	Ala	Gln	Leu	Trp
94		_	_	500			-		505					510		_
95	Ala	Ala	Glu	Glu	Leu	Asp	Met	Lys	Ala	Ile	Glu	Ala	Val	Ala	Ile	Ser
96			515			•		520					525			
97	Pro	Trp		Thr	Tvr	Gln	Leu		Tyr	Phe	Leu	Asp		Ile	Leu	Gln
98		530	-1-		-1-		535		- 1			540	-1-			
	Lvs		Pro	Leu	Pro	Pro		Asn	Val	Lvs	Lvs		Glv	Asp	Thr	Tvr
	545			Lcu		550			• • • •	275	559		011	1101		560
			r T14	s Sei	r Act			τ Δατ	n Δ1:	. Gl1			י ד.בי	ι Δν	יירי די	Gly
102					565			, ,,,,,		570		~ *3+,	, .c	7-	57!	_
		n Tle	_ 1/s ⁻	ים. ז			1 Acr	, Hie	. G1,			n Dha	יירים ב	1 Laze		l Lys
104			. va.	580	_	, wor	· wal	, 1112	585		· vol	- E116	- ++}	بوط ر. 590		. шуз
104				201	,				565	,				اور	•	

Input Set : A:\PTO.AMC.txt

	~3	-1	_	•••	•	a 1.	~ 1	T	~1	ml .	.	D	• • • •	m	
	Glu	Pne		HIS	Asn	GIn	GIY	_	GIN	гÀг	Tyr	Thr		Pro	Leu	Tyr	
106	77.5 ~	77-	595 Mat	Mat	a1	۵1	C	600	ו בינו	77.	<u>ما</u> ۔	mh	605	71-	T	a 1	
	His	610	Mec	Met	GIY	GIY	615	GIU	val	Ala	GIII	620	Leu	нта	пуъ	GIU	
108	Thr		ת דת	cor	Thr	ת 1 ת		Gl n	Lon	Uic	Cor		Val	1757	λcn	Tree	
	625	Pne	Ala	ser	TIII	630	ser	GIII	ьеи	nis	635	ASII	vaı	val	MSII	640	
	Val	Cln	Gln.	Tlo	17-1		Dro	Lyc	Gly	Cor	633					040	
112	vai	GIII	GIII	116	645	AIG	FIU	цуз	Gry	650							
	<210	\	זז הי	NO.						030							
	<211																
					133												
	5 <212> TYPE: DNA 7 <213> ORGANISM: Homo sapiens																
	<220> FEATURE:																
	<220> FEATURE: <221> NAME/KEY: CDS																
	<221> NAME/KEY: CDS <222> LOCATION: (62)(2011)																
	21 <222> LOCATION: (62)(2011) 23 <400> SEQUENCE: 2																
	124 geggeegegt egaceteece tegggttege ggeeeggeeg gtgageaacg getetgegge															60	
																109	
126						_				_						rg Pro	
127					_	5				_	10	•			_	15	
129	ctg	cac	tcc	gcg	cag	gct	gtg	gac	gtg	gcc	tcg	gcc	tcc	aac	ttc	cgg	157
	Leu				_	_	_	-		-	_	_					
131				20				_	25					30			
133	gcc	ttt	gag	ctg	ctg	cac	ttg	cac	ctg	gac	ctg	cgg	gct	gag	ttc	999	205
134	Ala	Phe	Glu	Leu	Leu	His	Leu	His	Leu	Asp	Leu	Arg	Ala	Glu	Phe	Gly	
135			35					40					45				
137	cct	cca	ggg	ccc	ggc	gca	ggg	agc	cgg	999	ctg	agc	ggc	acc	gcg	gtc	253
138	Pro	Pro	Gly	Pro	Gly	Ala	Gly	Ser	Arg	Gly	Leu	Ser	Gly	Thr	Ala	Val	
139		50					55					60					
	ctg																301
142	Leu	Asp	Leu	Arg	Cys	Leu	Glu	Pro	Glu	Gly	Ala	Ala	Glu	Leu	Arg	Leu	
143						70					75					80	
	gac																349
	Asp	Ser	His	Pro	_	Leu	Glu	Val	Thr		Ala	Ala	Leu	Arg	_	Glu	
147					85					90					95		
	cgg																397
	Arg	Pro	Gly		Glu	Glu	Pro	Pro		Glu	Pro	Val	Ser		Tyr	Thr	
151				100					105					110			–
	cag																445
	Gln	Pro		Ser	His	Tyr	GIY		Ala	Leu	Cys	Val		Phe	Pro	Gin	
155			115					120					125				400
	CCC																493
	Pro	-	Arg	Ala	Ala	GLu	-	Leu	GIN	vaı	ьeu		Tnr	туr	Arg	vaı	
159		130				_+-	135	L	.			140					C 4 3
	999																541
	Gly	GIU	GTÀ	Pro	GIY		Cys	Trp	ьeu	АТА		GIU	GIN	Tnr	АТА	_	
	145				- 1	150		_ ,,			155		4-			160	500
	aag																589
166	Lys	гàг	Lys	Pro	Pne	val	Tyr	Thr	GIn	GIY	GIn	Ala	val	ьeu	Asn	Arg	

Input Set : A:\PTO.AMC.txt

167					165					170					175		
169	gcc	ttc	ttc	cct	tgc	ttc	gac	acg	cct	gct	gtt	aaa	tac	aag	tat	tca	637
						Phe											
171				180	_		_		185			_	_	190	_		
173	gct	ctt	att	gag	gtc	cca	gat	ggc	ttc	aca	gct	gtg	atg	agt	gct	agc	685
						Pro											
175			195				_	200					205				
177	acc	tgg	gag	aag	aga	ggt	cca	aat	aag	ttc	ttc	ttc	caq	atq	tgt	cagʻ	733
						Gly											
179		210		-	_	-	215		-			220			-		
181	ccc	atc	ccc	tcc	tat	ctg	ata	gct	ttg	gcc	atc	gga	gat	ctg	gtt	tcg	781
						Leu		_		_				_	_	_	
	225				_	230					235	_	_			240	
185	gct	gaa	gtt	gga	CCC	agg	agc	cgg	gtg	tgg	gct	gag	ccc	tgc	ctg	att	829
						Arg											
187				-	245			_		250				-	255		
189	gat	gct	qcc	aat	qaq	gag	tac	aac	qqq	qtq	ata	gaa	qaa	ttt	ttq	qca	877
						Glu											
191	-			260			-		265					270			
193	aca	qqa	qaq	aaq	ctt	ttt	qqa	cct	tat	qtt	tqq	qqa	aqq	tat	qac	ttq	925
						Phe											
195		•	275	-			-	280	-		-	-	285	-	-		
197	ctc	ttc	atg	cca	ccg	tcc	ttt	cca	ttt	gga	gga	atg	gag	aac	cct	tgt	973
						Ser											
199		290					295			-	-	300				_	
201	ctg	acc	ttt	gtc	acc	ccc	tgc	ctg	cta	gct	ggg	gac	cgc	tcc	ttg	gca	1021
						Pro											
	305					310	-				315	-	-			320	
205	gat	gtc	atc	atc	cat	gag	atc	tcc	cac	agt	tgg	ttt	ggg	aac	ctg	gtc	1069
						Glu											
207	_				325					330	_		_		335		
209	acc	aac	gcc	aac	tgg	ggt	gaa	ttc	tgg	ctc	aat	gaa	ggt	ttc	acc	atg	1117
210	Thr	Asn	Ala	Asn	Trp	Gly	Glu	Phe	Trp	Leu	Asn	Glu	Gly	Phe	Thr	Met	
211				340					345					350			
213	tac	gcc	cag	agg	agg	atc	tcc	acc	atc	ctc	ttt	ggc	gct	gcg	tac	acc	1165
214	Tyr	Ala	Gln	Arg	Arg	Ile	Ser	Thr	Ile	Leu	Phe	Gly	Ala	Ala	Tyr	Thr	
215			355					360					365				
217	tgc	ttg	gag	gct	gca	acg	ggg	cgg	gct	ctg	ctg	cgt	caa	cac	atg	gac	1213
218	Cys	Leu	Glu	Ala	Ala	Thr	Gly	Arg	Ala	Leu	Leu	Arg	Gln	His	Met	Asp	
219		370					375					380					
221	atc	act	gga	gag.	gaa	aac	cca	ctc	aac	aag	ctc	cgc	gtg	aag	att	gaa	1261
222	Ile	Thr	Gly	Glu	Glu	Asn	Pro	Leu	Asn	Lys	Leu	Arg	Val	Lys	Ile	Glu	
223						390					395					400	
225	cca	ggc	gtt	gac	ccg	gac	gac	acc	tat	aat	gag	acc	CCC	tac	gag	aaa	1309
226	Pro	Gly	Val	Asp	Pro	Asp	Asp	Thr	Tyr	Asn	Glu	Thr	Pro	Tyr	Glu	Lys	
227					405					410					415		
229	ggt	ttc	tgc	ttt	gtc	tca	tac	ctg	gcc	cac	ttg	gtg	ggt	gat	cag	gat	1357
230	Gly	Phe	Cys	Phe	Val	Ser	Tyr	Leu	Ala	His	Leu	Val	Gly	Asp	Gln	Asp	
231				420					425					430			

Input Set : A:\PTO.AMC.txt

	cag Gln																1405
235			435					440					445				
	agc			-	-	-		-	-			_	-				1453
238	Ser	450	ьeu	Ala	Asp	Asp	455	Leu	Asp	Pne	Tyr	ьеи 460	GIU	Tyr	Pne	PIO	
241	gag	ctt	aag	aaa	aag	aga	gtg	gat	atc	att	cca	ggt	ttt	gag	ttt	gat	1501
242	Glu	Leu	Lys	Lys	Lys	Arg	Val	Asp	Ile	Ile	Pro	Gly	Phe	Glu	Phe	Asp	
	465					470					475					480	
	cga																1549
	Arg	Trp	Leu	Asn		Pro	GIY	Trp	Pro		Tyr	Leu	Pro	Asp		Ser	
247					485				4	490					495	4	1505
	cct		-			_	_		-	-			_		_		1597
	Pro	GIY	Asp		ьeu	мет	ьys	Pro		GIU	GIU	ьeu	Ala		Leu	Trp	
251	~~~	~~~	~~~	500	a+ a	~~~	~ + ~		505	a++	~~~	~~~	~+~	510	250	t at	1645
	gca Ala																1645
255	Ala	Ата	515	Giu	ьеи	ASP	мес	520	АІа	116	Giu	на	525	міа	116	per	
	ccc	taa		200	tac	cac	cta		tac	ttc	cta	cat		atc	ctc	cad	1693
	Pro																1000
259		530	2,5		- 1 -	0111	535	***	- 7 -		LCu	540	_,_			01	
	aaa		cct	ctc	cct	cct		aat	ata	aaa	aaa		gga	gac	aca	tac	1741
	Lys													-			
	545					550	. 4			4	555		_	•		560	
265	cca	agt	atc	tca	aat	gcc	cgg	aat	gca	gag	ctc	cgg	ctg	cga	tgg	ggc	1789
	Pro																
267					565		_			570					575	_	
269	caa	atc	gtc	ctt	aag	aac	gac	cac	cag	gaa	gat	ttc	tgg	aaa	gtg	aag	1837
270	Gln	Ile	Val	Leu	Lys	Asn	Asp	His	Gln	Glu	Asp	Phe	Trp	Lys	Val	Lys	
271				580					585					590			
	gag		_			_		_	_	_							1885
	Glu	Phe		His	Asn	Gln	Gly	_	Gln	Lys	Tyr	Thr		Pro	Leu	Tyr	
275			595					600					605				
	cac																1933
	His		met	Met	GIY	GIY		Glu	vaı	Ala	GIn		Leu	Ala	гàг	GIU	
279	20+	610	~~~	+ a a	200	~~~	615	a	ata	020	200	620	~++	at a	224	t a t	1981
	act Thr																1901
	625	FILE	Ата	261	1111	630	SET	GIII	ьeu	птъ	635	ASII	vai	vai	ASII	640	
	gtc	cag	cad	atc	ata		ccc	aad	aac	agt		aaaci	- ca 1	tata	ratoo		2031
	Val										cage	-99C	ccy .	-g-g	cacg	3 C	2031
287	• • • •	0111	01		645			275		650							
	acat	acci	tat 1	cago	-	to da	aaact	tttca	а фаа		tat	t.t.at	tada	caa a	attco	ctgttc	2091
																aggtat	2151
																agcccc	2211
																gcagcg	2271
		_	_		_		_		_	_				_		tcttt	2331
																tgttc	2391
																aaaaa	2451
									_		_						

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01172006\J767308A.raw

ease Note:

ego of n and/or Xaa have been detected in the Sequence Listing. Please review the quence Listing to ensure that a corresponding explanation is presented in the <220> <223> fields of each sequence which presents at least one n or Xaa.

1#:3; Xaa Pos. 27

1#:8; Xaa Pos. 3,4,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23

VERIFICATION SUMMARY

DATE: 01/17/2006 TIME: 13:40:55

PATENT APPLICATION: US/10/767,308A

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01172006\J767308A.raw

306 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
310 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
313 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:16
376 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
380 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8
384 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8
385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:17

Raw Sequence Listing before editing, for reference only



IFW16

RAW SEQUENCE LISTING

DATE: 01/13/2006

PATENT APPLICATION: US/10/767,308A

TIME: 15:50:06

Input Set : A:\Sequence listing.txt

Output Set: N:\CRF4\01132006\J767308A.raw

4 <110> APPLICANT: Kapeller-Libermann, Rosana

5 White, David

6 MacBeth, Kyle J.

8 <120> TITLE OF INVENTION: 2786, A NOVEL HUMAN AMINOPEPTIDASE

10 <130> FILE REFERENCE: MPI99-193CN2M

12 <140> CURRENT APPLICATION NUMBER: US 10/767,308A

13 <141> CURRENT FILING DATE: 2004-01-29

15 <150> PRIOR APPLICATION NUMBER: US 09/443,795

16 <151> PRIOR FILING DATE: 1999-11-19

18 <150> PRIOR APPLICATION NUMBER: US 10/056,253

19 <151> PRIOR FILING DATE: 2002-01-24

21 <160> NUMBER OF SEQ ID NOS: 8

23 <170> SOFTWARE: FastSEQ for Windows Version 4.0

see pp 2-3

Does Not Comply Corrected Diskette Needed

ERRORED SEQUENCES

1/13/2006

Xaa Xaa Xaa Xaa Xaa Glu 20

<210> 2 <211> 2459 <212> DNA <213> Homo sapiens <220> <221> CDS <222> (62)...(2011)

<221> misc_feature <222> (1)...(3107)

<223> n = A, T, C or G

<400> 2

delete beeause: 1) orly 2459 rucleotides in the sequence 2) ho h's in the sequence

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/767,308A

DATE: 01/13/2006 TIME: 15:50:07

Input Set : A:\Sequence listing.txt

Output Set: N:\CRF4\01132006\J767308A.raw

L:127 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2 L:310 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:314 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3 L:317 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:16

L:380 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:384 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8
L:388 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8

L:388 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:8 differs:74

L:389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:0

M:341 Repeated in SeqNo=8